

We claim:

1. An electrical junction box, said junction box comprising:

a molded plastic junction box body including a back wall, and plural contiguous walls extending generally perpendicularly to said back wall, and each one of said plural contiguous walls joining integrally to the back wall and also to adjacent ones of said plural contiguous walls to cooperatively define a chamber within said junction box, and with said plural contiguous walls at respective end edges cooperatively forming an opening to said chamber;

at least one wall of said junction box body defining an insert recess for slidably receiving an insert member which carries at least one conduit socket into which a termination portion of an electrical conduit may be secured.

2. The electrical junction box of Claim 1 wherein said insert recess defined by said at least one wall is generally rectangular in elevation view, said insert recess including an outer portion of larger size, and an inner portion of smaller size, said inner and said outer portions cooperatively defining an outwardly disposed shoulder, whereby an insert member may be slidably received into said outer larger portion of said insert recess and may locate against said shoulder to position said insert member within said insert recess.

3. The electrical junction box of Claim 2 wherein said inner portion of smaller size is defined by a peripheral flange part, said peripheral flange part outwardly defining said shoulder, and said peripheral flange part inwardly of said junction box body defining a latching surface.

4. The electrical junction box of Claim 3 wherein said peripheral flange part further provides a chamfer surface adjacent to said shoulder, and said chamfer surface being disposed so that a latching portion of an insert member sliding into said insert recess encounters said chamfer surface and is deflected over said flange part to pass inwardly of said junction box along said insert recess and to thereafter engage said latching surface.

5. The electrical junction box of Claim 1 wherein said insert recess defined by said at least one wall is generally T-shaped in a direction of view parallel with sliding movement of an insert member into said insert recess, said insert recess including an outer portion of smaller size, and an inner portion of larger size, said inner and said outer portions cooperatively defining an inwardly disposed shoulder, whereby an insert member having a portion which is also of T-shape matching said insert recess may be slidably received into said inner and said outer portions of said insert recess and may locate against said shoulder to position said insert member within said insert recess.

6. The electrical junction box of Claim 5 wherein said insert recess includes an opening on a surface of said junction box, and a tongue recess portion at an end thereof opposite to said opening of said insert recess.

7. The electrical junction box of Claim 5 wherein said insert recess includes a pair of opposite latch engagement surfaces.

8. The electrical junction box of Claim 7 further including an elongate unlatching groove extending along each of said latch engagement surfaces from an opening of said insert recess to a closed end thereof.

9. An electrical junction box assembly comprising:
a molded plastic junction box body including a back wall, and plural contiguous walls extending generally perpendicularly to said back wall, and each one of said plural contiguous walls joining integrally to the back wall and also to adjacent ones of said plural contiguous walls to cooperatively define a chamber within said junction box, and with said plural contiguous walls at respective end edges cooperatively forming an opening to said chamber;

at least one wall of said junction box body defining an insert recess for slidably receiving an insert member which carries at least one conduit socket into which a termination portion of an electrical conduit may be secured;

10 an insert member having a portion sized and configured to be slidably received into and retain in said insert recess, said insert member outwardly defining a boss having a stepped through bore, and said stepped through bore including an outer portion thereof which provides a conduit socket into which an end termination portion of an electrical conduit may be received.

10. The electrical junction box assembly of Claim 9 wherein both said insert recess and said insert recess member portion are generally rectangular in elevation view.

11. The electrical junction box of Claim 10 wherein said insert recess of generally rectangular shape includes an outer portion of larger size and rectangular shape, and an inner portion of smaller size and rectangular shape, said inner portion and said outer portion cooperatively defining an outwardly disposed shoulder of rectangular shape, whereby said insert member may be slidably received into said outer larger portion of said insert recess and may locate against said shoulder to position said insert member within said insert recess.

12. The electrical junction box of Claim 11 wherein said inner portion of smaller size is defined by a peripheral flange part, said peripheral flange part outwardly defining said shoulder, and said peripheral flange part inwardly of said junction box body defining a latching surface.

13. The electrical junction box of Claim 12 wherein said peripheral flange part further provides a chamfer surface adjacent to said shoulder, and said chamfer surface being disposed so that a latching portion of an insert member sliding into said insert recess encounters said chamfer surface and is deflected over said flange part to pass inwardly of said junction box along said insert recess and to thereafter engage said latching surface, said insert member including a plurality of latching members each disposed on said portion thereof to engage first said chamfer surface and thereafter to engage said latching surface upon insertion of said insert member portion into said insert recess.

14. The electrical junction box of Claim 13 wherein said insert member portion includes four walls in rectangular arrangement, each of said four walls carrying a respective one of said plurality of latching members.

15. A molded non-conductive plastic junction box assembly, said junction box assembly including a junction box body defining at least one insert recess, and at least one insert member received into said insert recess, said junction box body comprising:

a back wall and at least four contiguous integral side walls each joined both to the back wall and to two adjacent ones of the at least four contiguous side walls, said contiguous side walls being disposed in spaced apart opposite pairs, said back wall and side walls cooperatively bounding a chamber within said junction box, and each side wall terminating at an end edge substantially in a common plane to cooperatively define an opening to said chamber, and at least one of said contiguous side walls defining an insert recess;

an insert member having a boss with a stepped through bore and said stepped through bore outwardly presenting a conduit socket into which an end termination portion of an electrical conduit may be received, said insert member having a portion complementary to said insert recess, and said portion being receivable into said insert recess to position said insert member on said junction box body.

16. The junction box assembly of Claim 15 further including said junction box body and said insert member cooperatively defining latching means for cooperatively engaging upon insertion of said insert member into said insert recess, said engaged latching means preventing removal of said insert member from within said insert recess.

17. A method of providing an electrical junction box, said method comprising steps of:

providing plural walls for said junction box, and cooperatively arranging and interconnecting said plural walls so as to substantially bound a volume;

5 utilizing an end edge of selected ones of said plural walls to cooperatively define an opening to said volume by which electrical components and electrical wiring may pass into and from said volume;

utilizing at least one wall of said plural walls of said junction box to define an insert recess, and configuring said insert recess to open outwardly from said volume, whereby said
10 insert recess may receive a matchingly configured insert member which provides for joining to said junction box of at least one electrical conduit;

providing an insert member having a portion which is complementarily configured to and which is receivable into said insert recess, utilizing said insert member to define a boss and a stepped through bore, utilizing said stepped through bore to outwardly include a portion
15 providing a conduit socket into which an end termination portion of an electrical conduit may be received and secured; and

inserting and securing said insert member into said insert recess.

18. The method of Claim 17 further including the steps of providing for said insert recess to include a larger sized portion opening outwardly on said junction box, and a smaller sized portion opening inwardly of said junction box to said volume, and utilizing said larger sized portion and said smaller sized portion to provide an outwardly disposed shoulder within
5 said insert recess.

19. The method of Claim 18 further including the step of providing for said insert recess to have a rectangular shape in elevation view.

20. The method of Claim 17 wherein the step of securing said insert member within said insert recess includes a step selected from the group consisting of: utilizing an adhesive upon said insert member, and providing mutual latching features on said insert member and on said junction box body, which mutual latching features engage upon insertion of said insert member into
5 said insert recess.